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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,596	04/02/2004	Euan Skinner Macleod	0978-0025	3139

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COOK, ALEX, MCFARRON, MANZO, CUMMINGS & MEHLER LTD  
SUITE 2850  
200 WEST ADAMS STREET  
CHICAGO, IL 60606

EXAMINER
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TILL, TERRENCE R

ART UNIT	PAPER NUMBER
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1744

MAIL DATE	DELIVERY MODE
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05/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/817,596

Applicant(s)

MACLEOD ET AL.

Examiner

Terrence R. Till

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8 and 9 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract exceeds 150 words and is not a single paragraph. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent to Hamada et al. (JP 2002-233483) in view of Dyson (US 4,573,236).
7. The Japanese patent to Hamada et al. discloses a vacuum cleaner comprising: a floor-engaging portion 1 having a first air inlet on the underside thereof; an upright portion 2 pivotally connected at its lower end to said floor-engaging portion; a detachable handle 3,4 upstanding from the upper end of said upright portion and having a first end and a second end; the handle including a rigid tubular duct 4 extending along the handle between a second air inlet at said first end thereof and an outlet 6 disposed intermediate opposite ends of said handle; and an elongate flexible hose 5 having a first end and a second end, the first end of the hose being connected to said outlet on said handle. Hamada et al. also disclose a first end of the handle is received in a socket 10 in the upper end of said upright portion of the cleaner, a second end of the handle 3a being closed and is shaped to provide a hand grip which can be grasped by the user. Hamada et al. does disclose a valve 22 opening and closing the fluid pathway from the floor engaging portion, but not one that has first and second inlet ports and an outlet. The patent to Dyson

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discloses a vacuum cleaner similar to that of Hamada et al. having a floor-engaging portion 2 having a first air inlet on the underside thereof; an upright portion 1 pivotally connected at its lower end to said floor-engaging portion; a detachable handle 6 upstanding from the upper end of said upright portion and a valve having a first inlet port fluidly connected to said first air inlet 38, a second inlet port 42 fluidly connected to the second end of said elongate flexible hose 45, an outlet port 30 connected to a dust separation device and means 22 for selectively connecting said valve outlet port to either said first or said second valve inlet ports. Therefore, because these two valve mechanisms were art-recognized equivalents at the time the invention was made, it would have been obvious to a person skilled in the art at the time the invention was made to provide the vacuum cleaner of Hamada et al. with the valve assembly of Dyson in order to be able to control the flow of air of Hamada et al.'s vacuum between the floor engaging portion and the detachable handle.

8. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al. '483, as modified by Dyson '236, as applied to claim 1 above, and further in view of Johnson et al. (US 5,331,715).

9. Hamada et al. '483, as modified by Dyson '236, disclose the outer portion of the first end of the handle comprising an elongate portion having a substantially uniform cross-sectional area (see figure 3), said socket being arranged to receive said elongate outer portion of the lower end of the handle, but does not disclose the cross-sectional area of the rigid tubular duct extending along the handle increases substantially from said second air inlet at said first end of the handle towards said outlet disposed intermediate opposite ends of said handle. The patent to Johnson et al. discloses an upright vacuum cleaner with an off-the-floor cleaning tool assembly 41,41,46,48

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that has a crevice tool 48 whose cross-sectional area increases substantially from the air inlet at said first end of the handle towards said outlet. It would have been obvious to a person skilled in the art at the time the invention was made to provide a crevice tool to the rigid tube of Hamada et al. 483, as modified by Dyson '236, in view of the teaching of Johnson et al. in order to clean carpet near the baseboards and in the crevices of furniture. With respect to claim 9, although Johnson et al. does not mention what the area percentage is, it would have been an obvious matter of engineering choice to a person skilled in the art at the time the invention was made to modify the crevice tool to have the cross-sectional area of the elongate outer portion of the lower end of the handle at said second air inlet is 40%-60% less than the cross-sectional area of the rigid tubular duct adjacent said outlet of the handle, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *Gardner v. TEC systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

***Allowable Subject Matter***

10. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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12. The patents to Bowden et al., Jacobs et al., Principe et al., Japanese patent to Kuroki et al., and German patent to Heid et al. show the current state of the art in vacuum cleaners with off-the-floor cleaning wands.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys P. Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Terrence R. Till  
Primary Examiner  
Art Unit 1744

trt